RF EXPOSURE
Test Report

Report No.: MTi241224017-01E4

Date of issue: 2025-01-11

Applicant: SWITCHMATE HOME LLC.

Product: PHOTOshare MYLUMA

Model(s): FML07SD, FML07WL

FCC ID: 2AT7Q-MYLUMA

Shenzhen Microtest Co., Ltd.

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Instructions

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2. The test results of this report are only responsible for the samples submitted;
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4. This report is invalid if transferred, altered or tampered with in any form without authorization;
5. Any objection to this report shall be submitted to the laboratory within 15 days from the date of receipt of the report.

Test Result Certification	
Applicant:	SWITCHMATE HOME LLC.
Address:	6400 Village Parkway, Suite 200 Dublin CA, 94568 United States
Manufacturer:	Shenzhen Along Electronics Co.,Ltd.
Address:	Shenzhen Baoan District Xixiang street Gushu community new Industrial Park 35
Product description	
Product name:	PHOTOshare MYLUMA
Trademark:	Simply Smart Home
Model name:	FML07SD
Serial Model:	FML07WL
Standards:	N/A
Test procedure:	KDB 447498 D01 v06 47 CFR PART 2.1091
Date of Test	
Date of test:	2025-01-06 to 2025-01-11
Test result:	Pass

Test Engineer	:	Maleah Deng
		(Maleah Deng)
Reviewed By	:	David. Lee
		(David Lee)
Approved By	:	Leon chen
		(Leon Chen)

RF EXPOSURE EVALUATION

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) Radiation as specified in §1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	$*900/f^2$	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	$*180/f^2$	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

MPE Calculation Method

Friis transmission formula: $Pd= (Pout*G)\ (4*pi*R^2)$

Where

Pd= Power density in mW/cm^2

Pout=output power to antenna in mW

G= Numeric gain of the antenna relative to isotropic antenna

Pi=3.1415926

R= distance between observation point and center of the radiator in cm(20cm)

Pd the limit of MPE, $1mW/cm^2$. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

Measurement Result

Bluetooth:

Operation Frequency: 2402-2480MHz,

2.4G WIFI:

Operation Frequency: WIFI 802.11b/g/n HT20: 2412-2462MHz, 802.11n HT40: 2422-2452MHz

Antenna Type: FPC Antenna

Antenna gain: 1.78dBi

Power density limited: 1mW/ cm^2

R=20cm

mW=10^(dBm/10)

Antenna gain Numeric=10^(dBi/10)= 10^(1.78/10)=1.51

BR&EDR:

Channel Freq. (MHz)	modulation	conducted power (dBm)	Tune-up power (dBm)	Max		Antenna		Evaluation result (mW/cm^2)	Power density Limits (mW/cm^2)
				tune-up power		Gain			
				(dBm)	(mW)	(dBi)	Numeric		
2402	GFSK	3.75	3±1	4	2.512	1.78	1.51	0.0008	1
2441		3.32	3±1	4	2.512	1.78	1.51	0.0008	1
2480		2.69	2±1	3	1.995	1.78	1.51	0.0006	1
2402	π /4-DQPSK	5.66	5±1	6	3.981	1.78	1.51	0.0012	1
2441		5.38	5±1	6	3.981	1.78	1.51	0.0012	1
2480		4.85	5±1	6	3.981	1.78	1.51	0.0012	1
2402	8DPSK	5.98	6±1	7	5.012	1.78	1.51	0.0015	1
2441		5.70	5±1	6	3.981	1.78	1.51	0.0012	1
2480		5.09	5±1	6	3.981	1.78	1.51	0.0012	1

BLE:

Channel Freq. (MHz)	modulation	conducted power (dBm)	Tune-up power (dBm)	Max		Antenna		Evaluation result (mW/cm^2)	Power density Limits (mW/cm^2)
				tune-up power		Gain			
				(dBm)	(mW)	(dBi)	Numeric		
2402	GFSK	7.61	7±1	8	6.310	1.78	1.51	0.0019	1
2440		7.51	7±1	8	6.310	1.78	1.51	0.0019	1
2480		6.85	6±1	7	5.012	1.78	1.51	0.0015	1

2.4G WIFI:

Channel Freq. (MHz)	modulation	conducted power	Tune-up power	Max		Antenna	Evaluation result at 20cm	Power density Limits
		(dBm)	(dBm)	tune-up power		Gain	Power density(mW/cm^2)	(mW/cm^2)
				(dBm)	(mW)	Numeric		
2412	802.11b	12.01	12±1	13	19.953	1.51	0.00598	1
2437		11.59	11±1	12	15.849	1.51	0.00475	1
2462		11.94	12±1	13	19.953	1.51	0.00598	1
2412	802.11g	16.49	16±1	17	50.119	1.51	0.01502	1
2437		16.27	16±1	17	50.119	1.51	0.01502	1
2462		16.28	16±1	17	50.119	1.51	0.01502	1
2412	802.11n H20	16.56	16±1	17	50.119	1.51	0.01502	1
2437		16.28	16±1	17	50.119	1.51	0.01502	1
2462		16.30	16±1	17	50.119	1.51	0.01502	1
2422	802.11n H40	16.31	16±1	17	50.119	1.51	0.01502	1
2437		16.27	16±1	17	50.119	1.51	0.01502	1
2452		16.17	16±1	17	50.119	1.51	0.01502	1

Conclusion:

Bluetooth and 2.4G WIFI can work simultaneously

BLE+2.4G WIFI=0.0019+0.015=0.0169

BR&EDR+2.4G WIFI=0.0015+0.015=0.0165

For the max result: 0.0169≤ 1.0 test exclusion threshold, No SAR is required.

----END OF REPORT----